

**What Is Claimed Is:**

1        1.    A reflection type liquid crystal display device,  
2 comprising:  
3        a first insulation substrate that is transparent and has  
4            a transparent electrode on an inner surface thereof;  
5        a second insulation substrate having a reflection  
6            electrode on an inner surface thereof, wherein a  
7            surface of the reflection electrode has  
8            hemi-ellipsoid bumps;  
9        a liquid crystal layer inserted between the transparent  
10           electrode and the reflection electrode; and  
11        a device for generating an electrical field between the  
12           transparent electrode and the reflection electrode.

1        2.    The reflection type liquid crystal display device  
2 according to claim 1, wherein the first insulation substrate  
3 is a glass substrate.

1        3.    The reflection type liquid crystal display device  
2 according to claim 1, wherein the transparent electrode is an  
3 ITO (indium tin oxide) layer.

1        4.    The reflection type liquid crystal display device  
2 according to claim 1, wherein the reflection electrode is an  
3 aluminum (Al) layer.

1        5.    The reflection type liquid crystal display device  
2 according to claim 1, wherein the hemi-ellipsoid bump has a long  
3 axis, a short axis and a height.

1        6.    The reflection type liquid crystal display device  
2 according to claim 1, wherein the long axis is 5~20 $\mu$ m.

1           7.    The reflection type liquid crystal display device  
2   according to claim 6, wherein the short axis is shorter than  
3   the long axis.

1           8.    The reflection type liquid crystal display device  
2   according to claim 5, wherein the height is 0.5~2 $\mu$ m.

1           9.    The reflection type liquid crystal display device  
2   according to claim 1, wherein a cross (or horizontal) section  
3   of the hemi-ellipsoid bump is an ellipse.

1           10.   The reflection type liquid crystal display device  
2   according to claim 1, wherein the hemi-ellipsoid bump is an  
3   inclined hemi-ellipsoid bump, and a cross (or horizontal)  
4   section of the inclined hemi-ellipsoid bump is an ellipse.

1           11.   The reflection type liquid crystal display device  
2   according to claim 1, wherein the device for generating an  
3   electrical field is a thin film transistor.

1           12.   The reflection type liquid crystal display device  
2   according to claim 11, wherein the thin film transistor is  
3   formed on the second insulation substrate and a drain electrode  
4   of the thin film transistor electrically connects the  
5   reflection electrode.

1           13.   The reflection type liquid crystal display device  
2   according to claim 11, further comprising:  
3        an organic insulation layer formed between the thin film  
4        transistor and the reflection electrode.

1        14. A reflection type liquid crystal display device,  
2 comprising:

3        a first insulation substrate that is transparent and has  
4            a transparent electrode on an inner surface thereof;  
5        a second insulation substrate having a reflection  
6            electrode on an inner surface thereof, wherein a  
7            surface of the reflection electrode has  
8            hemi-ellipsoid bumps;

9        a liquid crystal layer inserted between the transparent  
10           electrode and the reflection electrode; and

11       a device for generating an electrical field between the  
12           transparent electrode and the reflection electrode;  
13       wherein the hemi-ellipsoid bump has a long axis, a short  
14           axis, and a height;

15       wherein the long axis is 5~20 $\mu$ m, the short axis is shorter  
16           than the long axis, and the height is 0.5~2 $\mu$ m.

1        15. The reflection type liquid crystal display device  
2 according to claim 14, wherein the first insulation substrate  
3 is a glass substrate.

1        16. The reflection type liquid crystal display device  
2 according to claim 14, wherein the transparent electrode is an  
3 ITO (indium tin oxide) layer.

1        17. The reflection type liquid crystal display device  
2 according to claim 14, wherein the reflection electrode is an  
3 aluminum (Al) layer.

1        18. The reflection type liquid crystal display device  
2 according to claim 14, wherein a cross (or horizontal) section  
3 of the hemi-ellipsoid bump is an ellipse.

1        19. The reflection type liquid crystal display device  
2 according to claim 14, wherein the hemi-ellipsoid bump is an  
3 inclined hemi-ellipsoid bump, and a cross (or horizontal)  
4 section of the inclined hemi-ellipsoid bump is an ellipse.

1        20. The reflection type liquid crystal display device  
2 according to claim 1, wherein the device for generating an  
3 electrical field comprises a thin film transistor.